NATIONAL MARINE SANCTUARIES™

Sanctuary Advisory Council Information Bulletin Vol. 2, No. 9

September 2004

U.S. Department of Commerce
National Oceanic and Atmospheric Administration
National Ocean Service
National Marine Sanctuary Program

Channel Islands National Marine Sanctuary

The sanctuary coordinated and participated in a joint National Geographic Society/National Marine Sanctuary Field Study on August 9-12, to introduce student/teacher teams to the marine resources that are managed by the sanctuary program and increase their understanding on what makes marine sanctuaries national treasures. It also teaches them how to use the power of photography to capture the field study experience so that what is learned can be shared with others once participants return home. Twelve teachers and students, some local and some from other states, started their journey by crossing the Santa Barbara Channel on their way to Santa Cruz Island. They were joined by a team of scientists and experts to help them explore and learn about this unique marine sanctuary, sometimes called the "Galapagos of the North." Activities include ocean kayaking, whale watching and sandy beach monitoring.

Cordell Bank National Marine Sanctuary

Sanctuary scientists returned August 9 from an 8-day research mission exploring the hard to reach, remote habitats of sanctuary using the Delta Submersible, aboard the R/V *Velero*. The research cruise was a collaborative venture involving the sanctuary, U.S. Geological Survey, NOAA Fisheries/ Santa Cruz Laboratory and Washington State University. Researchers dove in Cordell Bank via the 2-person yellow submersible. The mission captured video and photos showing the diversity of sea life, health of habitat and characteristics of Cordell Bank and its surrounding habitats, including a first-look at many areas. Sightings included schools of rockfish, a mola mola and a giant Pacific octopus. Upon return of the cruise, the sanctuary staff began responding to print and broadcast media interest by preparing fact sheets, B-roll description and photos and interviews with the sanctuary manager. *The Bodega Bay Navigator* published a front-page photo of the Delta along with a two-page inside color spread with nine photos and an article. KTVU FOX-TV interviewed the sanctuary manager and ran a story on the evening news and KGO ABC San Francisco ran a news story with footage. The ABC story went nationwide with a clip of the Delta footage.

Florida Keys National Marine Sanctuary

The sanctuary hosted a very successful conference, "Connectivity: Science, People and Policy in the Florida Keys National Marine Sanctuary," August 19-21, 2004. The conference brought experts on coral reef ecosystems from other parts of the world together with scientists involved in research and monitoring in South Florida and local stakeholders to discuss the state of the marine environment in the Keys, how it compares to others worldwide and possible management steps to halt coral reef ecosystem decline. More than 150 people participated. Press coverage to date has included *The Key West Citizen, The Miami Herald, The Reporter*, WFFG 1300 AM, US 1 Radio.

Other coverage is forthcoming from Reuters, *The Washington Post*, Clear Channel Radio in the Upper Keys, *The Key Largo Times* and *Florida Scuba News*.

The search for the slave ship *Guerrero* and other submerged cultural resource sites off the Upper Keys began in early August. The project involves a partnership between the sanctuary, RPM Nautical Foundation, the Mel Fisher Maritime Heritage Museum and local maritime history volunteers. National Geographic News online has a story posted on the expedition and *The Key West Citizen* covered it on August 2nd, 2004.

Flower Gardens Bank National Marine Sanctuary

The sanctuary sponsored the first of two coral spawning cruises August 6-9, aboard the M/V *Spree*. Moderate spawning was observed, although the timing of the events was not consistent with previous observations over the years, and some species expected to spawn were not reported. This "confused spawn event" is consistent with observations throughout the Caribbean. Numerous other research projects were conducted during this cruise, including the initiation of an acoustic tagging project, a collaboration between the sanctuary and the Wildlife Conservation Organization. Two manta rays were successfully tagged with acoustic tags, and two receivers were deployed, one each at the West Flower Garden Bank and Stetson Bank. As funding becomes available, additional manta rays and other elasmobranches will be tagged, as well as commercial species of grouper and snapper. Opportunistic satellite tagging of whale sharks is also planned. Other projects included a squid aggregation study (University of California), coral reproduction (University of Calgary) coral diseases (University of Houston) and algal/coral interactions (University of Houston).

Gray's Reef National Marine Sanctuary

The 2004 field season has kept the Gray's Reef operations and research teams in constant motion. August has been a particularly busy month between cruises for paleo-environmental surveys with University of Georgia archeologist Dr. Ervan Garrison; deployment of enhanced instrumentation for the data buoy; and invertebrate identification and monitoring with Dr. Danny Gleason's group from Georgia Southern University.

NOAA's National Centers for Coastal Ocean Science (NCCOS) Biogeography Team conducted fish and invertebrate assessments in August, coupling the presence of these organisms with the different habitats at Gray's Reef. This work was borne out of the map of habitat types that NCCOS developed based on side scan and multibeam data collected by NOAA Ship Whiting in 2001. Knowing how the biology of Gray's Reef is coupled with particular habitat types will: 1) provide a baseline of current resources; 2) help us to understand how our resources are changing over time; and 3) provide a library of informa-

tion that could help restore habitat in the event of damage.

Reef Environmental Education Foundation (REEF) Advanced Assessment Team (AAT) members also conducted their annual fish counts at Gray's Reef NMS during August. This year, the AAT used a new census methodology to gather information on abundance and size class distribution of the managed complex of snapper-grouper fishes. The AAT divers were taken to a local pool and trained in methods widely accepted for the estimation of fish size; after a couple of hours, everyone was able to estimate the size of fish "models" within a variance of 5.0 centimeters. In addition to the traditional species diversity estimates that REEF divers provide, we'll now be able to use the REEF AAT to help us better understand the complex of fishes managed under the NOAA Fisheries and the South Atlantic Fisheries Management Council and how the size distribution of these species is changing with time.

Gulf of the Farallones National Marine Sanctuary

A documentary on the shipwreck S/S *Jacob Luckenbach* aired on August 30 on the History Channel. The piece aired as "Deep Sea Detectives: Time Bomb of the Deep."

The sanctuary and San Francisco Parks and Recreation Department reached out to young people from ethnically and socio-economically diverse constituencies. Five weeks were provided of free educational indoor and outdoor adventures for a total of 72 children from urban schools and recreation centers. Youths came from Garfield Park, Saint Mary's Recreation Center, Silver Terrace Playground, Visitation Valley playground, the Chinese American School, Chinese Recreation Center, and Miraloma Playground. One special group was from Project Insight, for hearing impaired youths, who learned about the sanctuary through signing and other nonverbal techniques.

Hawaiian Islands Humpback Whale National Marine Sanctuary

The sanctuary's newest office opened on July 29 at the Natural Energy Lab of Hawai'i facility, Keahole Point, Kona, Hawai'i. The new office will be administered by Hawai'i Department of Land and Natural Resources with NOAA-NMSP funding and staffed by a full-time marine conservation coordinator. First priorities for the new office include outreach to recreational boaters, instructional support for local educators and naturalists, and field research assistance.

The Maui site hosted a groundbreaking event for the new Sanctuary Learning Center to be built at the Kihei, Maui office with a ceremony that honored longtime sanctuary supporter, U.S. Senator Daniel Inouye. The festive event began with a pule, a traditional Hawaiian chant, and was followed by presentations from the Deputy Assistant Secretary for the Oceans and Atmosphere of NOAA, and the Mayor of Maui County. Senator Inouye was presented with

a traditional fishtrap. He was also presented with the National Marine Sanctuary Foundation's 2004 Steward of the Sanctuary Award. The Director of NOAA's Pacific Services Center presented B-WET grant awards to three local organizations. Senator Inouye gave a very inspiring speech followed by keiki (children's) hula dance and a traditional hukilau (fishing) demonstration. The event focused on the community and educational uses and advantages that the new building will provide.

Monterey Bay National Marine Sanctuary

On July 29, SIMoN staff participated with Monterey Bay Aquarium education staff and some of their students to remove the invasive Asian kelp *Undariapinnatifida* from the Monterey Harbor. Over 25 students in the Young Women in Science program paddled into the marina on kayaks and removed 150 pounds of *Undaria* from the edges of the docks. The Young Women in Science program is designed to encourage female students' interest in careers in the sciences. The Aquarium pairs participants with several female staff in activities such as snorkeling in a kelp bed and kayaking on the bay. This program instills a conservation ethic in young people and feeds the dreams of future scientists.

The sanctuary has a new high-resolution GIS elevation model of Elkhorn Slough. A joint project between the National Marine Sanctuary Program and the National Ocean Service's Remote Sensing Division collected Light Detection and Ranging Laser (LIDAR) elevation data in Elkhorn Slough last spring. This pilot "data fusion" project utilized the NOAA Citation Jet which carried a LIDAR and a new digital camera. With help from California State University's sea floor mapping lab, high-resolution multibeam bathymetry collected in 2003 was married with the LIDAR information to form a seamless GIS layer. This GIS layer will be used to model the hydrography of the Elkhorn Slough region, addressing tidal scour management issues.

Olympic Coast National Marine Sanctuary

Sanctuary staff met with representatives of the Pacific Whiting Conservation Cooperative (PWCA) to discuss the sanctuary's Area to Be Avoided (ATBA). The PWCA includes four companies, operating 10 catcher/processor vessels licensed to participate in the Pacific whiting fishery. Three of the cooperative's vessels were identified transiting the ATBA en-route to the whiting fishing grounds in May. Because these vessels are over 1,600 gross registered tons (GRT), they are subject to the voluntary ATBA. The PWCA agreed to pass on the information regarding the ATBA to their fleet and expressed their willingness to comply with the ATBA.

National Marine Sanctuary Program

NOAA's National Marine Sanctuary Program, with support from the U.S. Navy's Office of Naval Research, conducted the hunt for the *Alligator*—the U.S. Navy's first submarine. Based in Ocracoke, N.C., the 2004 NOAA-ONR expedition took place August 22-30 off Cape Hatteras, N.C. in the "Graveyard of the Atlantic," where the Civil War-era vessel was lost during a fierce storm in 1863. The search is part of an ongoing effort by NOAA, ONR and partners to uncover the *Alligator*'s secrets. Launched in 1862, the green, 47-foot *Alligator* represented a significant leap forward in naval engineering.